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Produktinformation

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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PRODUCT INFORMATION

SARS-CoV-2 nsp7 (recombinant)

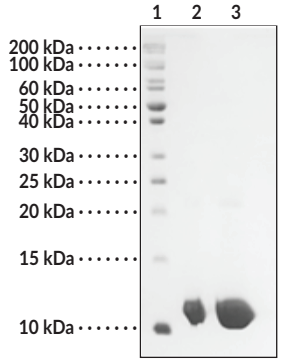
Item No. 40881

Overview and Properties

Synonyms:	SARS-CoV-2 Non-structural Protein 7, Severe Acute Respiratory Syndrome Coronavirus 2 nsp7
Source:	Recombinant SARS-CoV-2 C-terminal His-tagged nsp7 expressed in *E. coli*
Amino Acids:	3,831-3,913
Uniprot No.:	P0DTD1
Storage:	-80°C (as supplied); avoid repeated freeze/thaw cycles
Stability:	≥1 year
Purity:	≥90%
Supplied in:	50 mM Tris-HCl, pH 7.5, with 200 mM sodium chloride and 20% glycerol
Endotoxin Testing:	< 1.0 EU/µg, determined by the LAL endotoxin assay
Protein Concentration:	***batch specific*** mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Markers
Lane 2: SARS-CoV-2 nsp7 (2 µg)
Lane 3: SARS-CoV-2 nsp7 (10 µg)

SDS-PAGE Analysis of SARS-CoV-2 nsp7

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PRODUCT INFORMATION

Description

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is an enveloped positive-stranded RNA virus and the causative agent of COVID-19, a primarily respiratory illness characterized by fever, cough, and shortness of breath that can lead to life-threatening complications.[1-5] The SARS-CoV-2 genome contains approximately 30 kilobases and 14 open reading frames (ORFs) that encode four structural proteins: spike, envelope, membrane, and nucleocapsid, as well as 16 non-structural proteins and 9 accessory factors.[6] SARS-CoV-2 non-structural protein 7 (nsp7) is encoded within *ORF1ab* and is a cofactor in the RNA replication transcriptional complex. nsp7 is highly conserved in coronaviruses, and in SARS-CoV-2 it forms a decameric RNA replication transcriptional complex with the RNA polymerase cofactor nsp8 and the RNA-dependent RNA polymerase (RdRp) nsp12.[7] Mutations in the nsp7-nps8 binding interface reduce the stability of the RNA replication transcriptional complex, leading to impaired RNA polymerase activity.[8]

References

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